Appln. No.: 09/976,746

Amendment dated March 8, 2004

Reply to Office Action of December 8, 2003

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (currently amended) An imaging composition for obtaining images by medical diagnostic imaging procedures comprising in combination:

one or more particles <u>comprising gadolinium oxide</u> selected from the group consisting of gadolinium, zinc, magnesium, manganese, calcium and compounds thereof; and

one or more microsphere shells <u>including a protein comprising albumin</u> each <u>shell</u> having an inner wall and an outer wall and encapsulating <u>the</u> one or more particles between the inner and outer walls, <u>one or more said microsphere shells having an average diameter of no more than</u> about 70,000 Å,

the composition effective in a single dose without administration of additional doses of an imaging composition in an in vivo administration for obtaining images using more than one imaging modality.

Claims 2-3 (canceled)

- 4. (currently amended) A composition in accordance with claim 1 [[2]], wherein the gadolinium particles and gadolinium compound said particles are spherical.
  - 5. (canceled)
- 6. (currently amended) A composition in accordance with claim 4, wherein the gadolinium particles and gadolinium compound said particles have diameters of no more than about 450 angstroms.

Claims 7-8 (canceled)

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9. (withdrawn) A composition for use in vivo during neutron capture therapy

comprising a gadolinium particle or a gadolinium compound particle encapsulated in a

microsphere shell.

10. (withdrawn) A composition in accordance with claim 9, wherein the gadolinium

particle or gadolinium compound particle is spherical.

11. (withdrawn) A composition in accordance with claim 10, wherein the gadolinium

compound particle is gadolinium oxide.

12. (withdrawn) A composition in accordance with claim 9, wherein the microsphere

shell includes a protein substance.

13. (withdrawn) A composition in accordance with claim 9, wherein the microsphere

shell is selected from the group consisting of bovine serum albumin, human serum albumin,

lipids, liposomes, pepsin, gelatin, dextrose, dextrose-albumin, an antibody shell, and

combinations thereof.

14. (currently amended) A method of obtaining images using medical diagnostic

imaging modalities comprising:

administering in vivo an imaging composition comprising a suspension of microsphere

shells including a protein comprising albumin and having inner and outer walls encapsulating

between the inner and outer walls one or more particles comprising gadolinium oxide selected

from the group consisting of gadolinium, zinc, magnesium, manganese, calcium and compounds

thereof, the imaging composition administered in an amount effective for obtaining images using

two or more imaging modalities;

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obtaining a second image using a second imaging modality different from the first imaging modality without administration of an additional amount of the imaging composition or an amount of another imaging composition to obtain the second image.

- 15. (canceled)
- 16. (withdrawn) A method of neutron capture therapy for treating cancerous cells comprising administering to a patient a composition including a plurality of gadolinium particles or gadolinium compound particles encapsulated in microsphere shells to a predetermined area containing the cancerous cells and applying a source of thermal neutron irradiation to the predetermined area in a manner effective for causing the gadolinium particles or gadolinium compound particles to release radiation for treating the cancerous cells.

Claims 17-22 (canceled)

- 23. (new) A composition in accordance with claim 1, wherein said particles have diameters of between about 50 Å and about 20,000 Å.
- 24. (new) A composition in accordance with claim 23, wherein said particles have diameters of between about 50 Å and about 750 Å.
- 25. (new) A composition in accordance with claim 24, wherein said particles have diameters of between about 200 Å and about 400 Å.
- 26. (new) A composition in accordance with claim 1, wherein said microsphere shells
  have an average diameter between about 5,000 Å and about 40,000 Å.

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27. (new) A composition in accordance with claim 1, wherein one or more particles are pegylated.

- 28. (new) A composition in accordance with claim 27, wherein said particles have diameters of between about 200 Å and about 400 Å.
- 29. (new) A composition in accordance with claim 1, wherein the albumin is selected from the group consisting of bovine serum albumin, human serum albumin and combinations thereof.
- 30. (new) The method in accordance with claim 14, wherein said particles have diameters of between about 50 Å and about 20,000 Å.
- 31. (new) The method in accordance with claim 30, wherein said particles have diameters of between about 50 Å and about 750 Å.
- 32. (new) The method in accordance with claim 31, wherein said particles have diameters of between about 200 Å and about 400 Å.
- 33. (new) The method in accordance with claim 14, wherein said microsphere shells have an average diameter between about 5,000 Å and about 40,000 Å.
- 34. (new) The method in accordance with claim 14, wherein one or more particles are pegylated.
- 35. (new) The method in accordance with claim 34, wherein said particles have diameters of between about 200 Å and about 400 Å.
- 36. (new) The method in accordance with claim 14, wherein the albumin is selected from the group consisting of bovine serum albumin, human serum albumin and combinations thereof.